



IT'S A FACT

YOU CAN EVALUATE ERGONOMIC PRODUCTS TO SEE IF THEY TRULY MEET YOUR NEEDS

It is a vendor's job to sell. It is *your* job to cut through the sales pitch to determine if what is being offered truly meets your needs. Some suggestions for evaluating a product are presented below. For additional guidance, contact your local occupational health or safety office.

Keep in mind, specifications like “ergonomically designed” and “user friendly” are very general and vague. Assume products with these descriptions are not any better than any other products on the market.

In order for a product to be truly “ergonomically designed,” it should reduce one of the ergonomic risk factors (vibration, force, awkward or static posture, duration of exposure or mechanical compression) without creating new hazards.

- **Take advantage of the end users.** The end users of the products are your best resource for developing specifications for purchase. End users will know what features will make their jobs safer and easier.
- **Ask around.** Certainly you are not the first person to buy this product. Ask others in your field if they have purchased similar products. Ask the vendor for references and follow up on them.
- **Perform “real life testing.”** The best way to evaluate equipment is to use the equipment under a variety of conditions with different users. Work with local logistics personnel and contact the vendors. Some may provide a demonstration of their equipment, or allow you to test it, prior to purchase.
- **Evaluate the product literature.** Look for adjustability to accommodate a wide range of users. If the equipment is not adjustable, look at the working dimensions and assess the usability for your working population. Keep in mind who published/researched the product.

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- **Evaluate the manufacturer's "track record."** Does the manufacturer usually provide a good ergonomic design based on your (or someone else's) experience with the manufacturer?
- **Evaluate the vendor's reputation.** Vendors with a reputation for quality design work tend to consider the human usability of their designs.
- **Develop clear specifications for the equipment.** This is the best way to evaluate the equipment without hands-on use *prior* to purchase. Know the job and know the circumstances surrounding the use of the product.
- **Consider:**

Biomechanics and Anthropometrics. How heavy is the product? How big is the product? Does it match the size and strength of your users? For example, an all female population should have tool handles with smaller diameters.

Human Factors. Does the product follow human factors guidelines? Is the product intuitive to use or does it take considerable training? For example, emergency stop buttons should be red.

Endurance. How long is the product used? Is the product used continuously throughout the day? For example, a tool that is used throughout the day needs to be as light as functionally possible.

Manipulation. What types of movements are made with the product? Are the users making gross or fine movements? For example, a tool that requires fine movements should be lightweight and have a good center of gravity.

Environment. What types of environment is the product going to be used in? Is it going to be cold or wet or is it going to be used in a clean room, etc.? For example, a product used in a wet environment should have anti-slip coating.

Remember: Buyer Beware!

This fact sheet is a product of the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) Ergonomics Program, providing installation-level ergonomics services, consultation, and training for the U.S. Army. If you have questions, need assistance, are looking for training, or want to schedule an assessment of your workplace, contact a USACHPPM ergonomist at 410-436-3928 or ArmyErgonomics@amedd.army.mil.